

Effect of Pendulous and Erect Pinna on Population Size and Frequency of *Malassezia globosa* and *Malassezia pachydermatis* in External Ear Canal of Healthy Dogs

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Abstract

Forty clinically healthy stray dogs were used to determine the effect of type of pinna on the population size and frequency of *Malassezia globosa* and *Malassezia pachydermatis* in external ear canal of healthy dogs. Two methods were used: cytological examination and fungal culture. The prevalence of *M. globosa* were 25 and 40% in pendulous and erect pinna, respectively. Both pinna recorded a very low mean count of 0.03 yeast/hpf. However, no growth of colonies was seen on modified Dixon's agar, therefore, *M. globosa* could not be confirmed. This study confirmed a high prevalence of *M. pachydermatis* in dogs with pendulous pinna (90%) which was higher than in dogs with erect pinna (65%). High population size of *M. pachydermatis* can be isolated from dogs with pendulous pinna (1074 cfu per swab) and dogs with erect pinna (466 cfu per swab) using fungal culture. There was a strong association of occurrence of otitis externa and type of pinna which predisposed dogs with pendulous pinna to be twenty-one times more at risk of developing otitis externa than dogs with erect pinna.

Keywords: pendulous, erect, population size, frequency, *Malassezia globosa*, *Malassezia pachydermatis*, external ear canal.